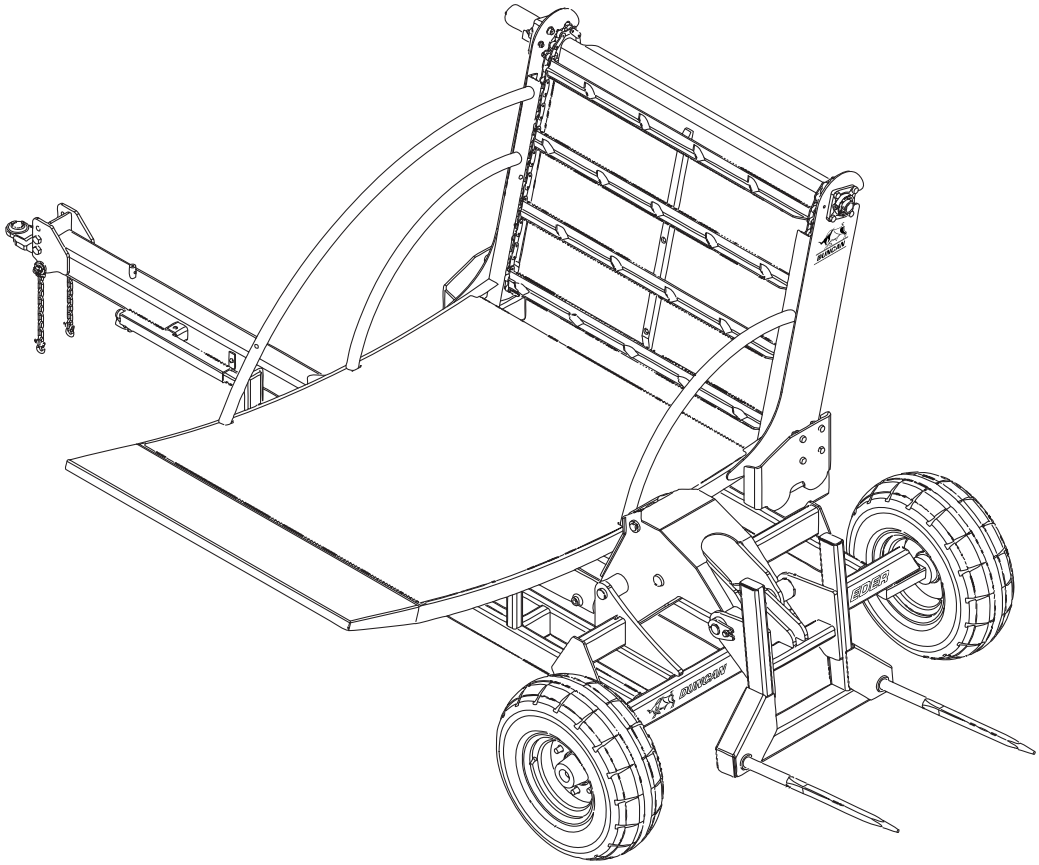
Owners Manual

DUNCAN

DUNCAN SLR FEEDER

ORIGINAL INSTRUCTIONS



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Pt. No. 67368
Issue 0510

Duncan SLR Feeder Contents

		Page
Introduction		**2**
Acquisition & Warranty		**2**
Disclaimer		**2**
Description of Machine	Working Principle	**3**
Specification		**3**
SAFETY - General	Safety Symbols on Machine	**4**
	Operator Safety	**5**
	Be Prepared for Emergencies	**5**
	Appropriate Dress	**6**
	Transport This Machine Safely	**6**
	Handle Agricultural Chemicals Safely	**7**
	Avoid High Pressure Fluids	**7**
	Safe Work Practices	**7**
	Practise Safe Maintenance	**8**
SAFETY - Machine Specific	Hazard Points	**9**
	Safety Decals & Safety Guards	**11**
Transport		**12**
Operation	Tractor hookup	**13**
	Loading a bale	**14**
	Feeding out	**15**
Maintenance & Care	Lubrication Instructions	**16**
	Maintenance Schedule	**17**
	Storage	**17**
	Maintenance Notes	**18**
Parts List	Base Machine	**21**
	Main Assembly	**22**
	Machine Base	**24**
	Forks System	**26**
	Bed System Drive	**28**
	Bed System Extension, Wear Strip, Ram Pin	**30**
	Hydraulics	**32**

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Introduction

Acquisition & Warranty

On delivery of your new Duncan SLR Feeder please check that the machine is not damaged. In cases of shipping damage, please ask your dealer to arrange for the appropriate claim to be lodged immediately. Assemble any parts supplied loose and inspect your machine with the aid of this manual to familiarise yourself with its features. If you have any queries ask your dealer straight away. The machine is covered by our 12 month warranty on faulty parts, subject to normal use.

Record the serial number of your machine below and keep it in a secure place to help trace the machine and assist us when you order parts.

Model: .....
Serial No: .....
Owner: .....
.....
.....
Delivery Date: .....
Dealer: .....
.....
.....

This Document contains the Original Operating Instructions for this machine and are verified by the Manufacturer.

Signed:.....

Product Development Manager

The Owner's Manual

Your new Duncan SLR Feeder will give long and efficient service if given normal care and operated properly.

This owner's manual is provided so that you can become thoroughly familiar with the design of the machine and to furnish information on correct operation, adjustment and maintenance. **Only persons well acquainted with these guidelines should be allowed to use the equipment.**

A separate illustrated parts section has been provided so that if any parts are required your dealer will be able to supply them by reference to part numbers.

The manual is considered as part of your machine and must remain with the machine when it is sold.

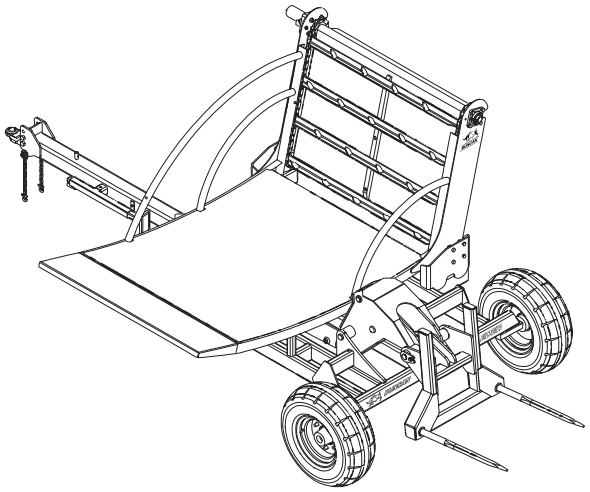
Right and left hand references in this manual are determined by standing behind the machine and facing in the direction of travel.

Disclaimer

Every effort has been made to ensure that the information in this manual was accurate and up to date at the time of going to press. Clough Agriculture Ltd reserves the right to make subsequent changes to the machine, where necessary, without notification.

The Company will not be responsible for any damage or consequential loss arising out of misinterpretation or failure to follow recommended procedures. Nor will it be liable for any damage caused by or arising out of modification or misuse of its product.

The owner has a responsibility to protect himself and others by observing all safety information and by ensuring all operators are well acquainted with the safety information, trained in the correct use of the machine and applying safe work practices.



Description of Machine

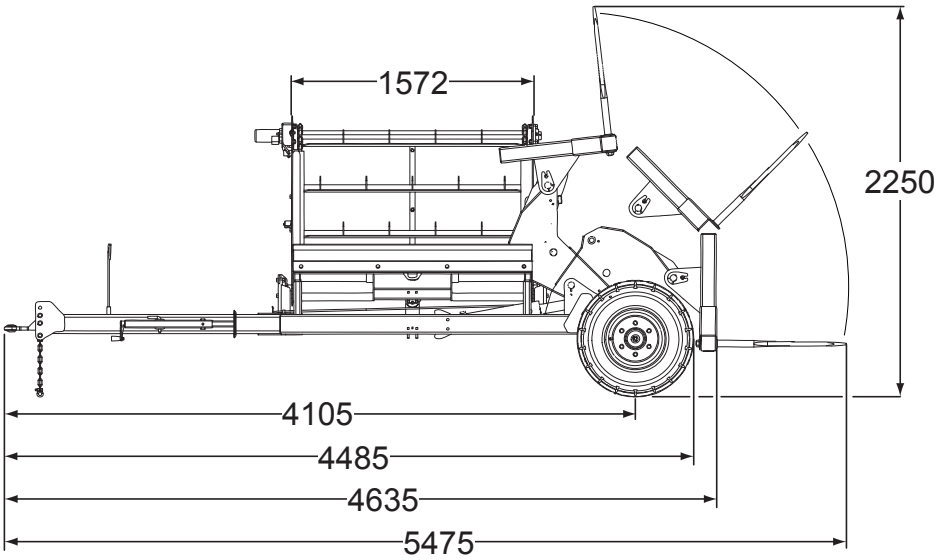
The Duncan 'SLR Feeder' will handle Square bales, Loose silage and Round bales.
The fork and bed system give the user full control over loading and unwrapping of the bale.
Two bales may be carried on the machine.

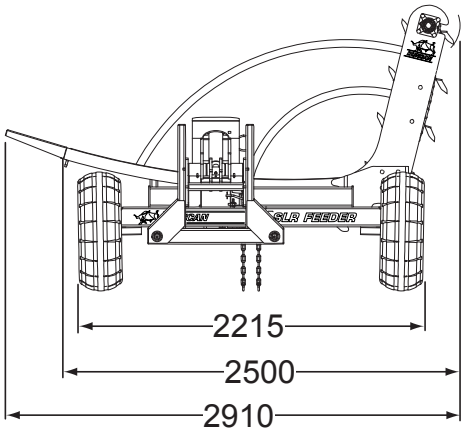
Working Principle

The bale is loaded by reversing into it and then placing it on the feedout bed using the hydraulic fork system.

The bale may be held to facilitate unwrapping.

The bale may then be fed out under full operator control.





Specifications	
Max Bale Size Round	*6 ft*
Max Bale Size Square	*6ft x 6ft (x 8ft Long)*
Tyre Size/Load Rating	*10/75 15.3 10 Ply (123A8)*
Tyre Pressure	*5.2 bar (75psi)*
Unladen Weight	*1275kg*
Drawbar Weight	*420kg*
Maximum Speed	*40km/hr*

ATTENTION

On the machine important safety information is indicated by these symbols.
These highlight general safety aspects in regard to the machine rather than specific hazards.

Do not ride or allow passengers on the machine.
Under no circumstances are passengers to be permitted on the machine while it is in operation or being transported. Any footboards and/or footsteps are provided solely for the purpose of preparing the machine for use.

Keep clothing and body extremities well clear of pinch points while the machine is operating Keep well clear of moving parts at all times.
These signs typically occur wherever trapping points exist. These include drive chains, sprockets, shafts, wheels, pivot points, etc. Guards are provided with the machine for safety reasons (where practical without compromising machine performance). Ensure these are always fitted during operation.

Always exercise extreme caution in the vicinity of sharp edges and points.
Where possible guards are provided with the machine for safety reasons (where practical without compromising machine performance). Ensure these are always fitted during operation.

Footboards, footsteps, drawbars and other machine surfaces may be slippery when wet.
Apply extra caution in wet conditions and in the early morning when surfaces are wet.

Keep Clear. (It is dangerous to be in this area when the machine is operating.)

SAFETY - General

N.B. Throughout this manual important safety information is indicated by these symbols in the margin:

A prohibition should be observed under all circumstances.

A warning indicates a hazard that could cause death or injury if the warning is ignored.

A caution indicates a hazard that may cause damage to property if the caution is ignored.

This section of the manual offers general guidelines for the safe operation of machinery. It does not replace local safety regulations. These guidelines were current at the time of publication, but may be superseded by later regulations.

Clough Agriculture has made every effort to highlight all risks to personnel or property. Owners and operators have a responsibility to exercise care and safe work practices at all times in the vicinity of the machine.

Owners are advised to keep up to date on safety issues and to communicate these to all users of the machine.

Contact the Occupational Safety and Health Service (OSH) for further information about general safety aspects. If you have safety concerns specifically related to this machine, contact your dealer immediately.

Operator Safety

Read this manual carefully before operating new equipment. Learn how to use this machine safely.
Be thoroughly familiar with the controls and the proper use of the equipment before using it.

Take careful note of all safety instructions both in this manual and on the machine itself. Failure to comply with instructions could result in personal injury and/or damage to the machine.

Replace missing or damaged safety signs on the machine and ensure that these remain clearly visible.

It is the owner's responsibility to ensure that anyone who operates, adjusts, lubricates, maintains, cleans or uses the machine in any way has had suitable instruction and is familiar with the information in this manual (particularly with regard to safety aspects).

Operators and other users of the machine should be aware of potential hazards and operating limitations.

Be Prepared for Emergencies

Keep a first aid kit and fire extinguisher handy.

Keep emergency numbers for doctors, ambulance, hospital and fire department near your telephone.

SAFETY - General (Continued)

WARNING

Appropriate Dress

Wear close fitting clothing and avoid rings or other forms of jewellery which could become caught in the machinery.

People with long hair must have it securely fixed and confined close to the head.

Refer to local safety standards for protective clothing and recommended safety equipment.

Adequate protection, such as a face mask, should be worn if operating this machine in dry and dusty conditions.

WARNING

Transport This Machine Safely

Ensure that all linkage pins and security clips are fitted correctly. With trailing machines tow with the drawbar only, as this is the only safe towing point on the machine.

Always check that bystanders (especially children) are well clear (front and rear) before starting and moving the tractor and the machine.

Plan safe routes of travel, and be aware of power lines and other roadside hazards. Take particular care when towing implements on hillsides.

Do not ride or allow passengers on the machine.

This machine is not designed to carry passengers, and no riders are permitted.

Road transport

On public roads,

- A speed of 40km/h must not be exceeded.
- Do not operate during the hours of darkness unless standard lights are fitted and clearly visible. (This also applies when visibility is limited, e.g., in foggy conditions.)

See the guidelines in the *Vehicle Dimensions and Mass Rule*, issued by the Land & Transport Safety Authority.

Avoid tip-overs

Run the machine along hillsides with the elevator on the high side of the hill. Avoid holes, ditches and obstructions which may cause the machine to tip over, especially on hillsides. Never drive near the edge of a gully or steep embankment - it might cave in. Slow down for hillsides, rough ground and sharp turns.

SAFETY - General (Continued)

Handle Agricultural Chemicals Safely

All farm chemicals should be stored, used, handled and disposed of safely and in accordance with the supplier's/ manufacturer's recommendations.

Read the product label before using, noting any warnings or special cautions, including any protective clothing or equipment that may be required, ie. respirator.

Do not eat or smoke while handling sprays, fertilisers, coated seeds, etc. Afterwards, always wash your hands and face before you eat, drink, smoke, or use the toilet.

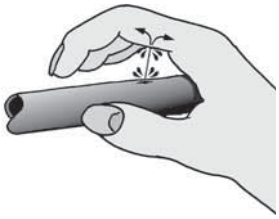
Store sprays, fertilisers, coated seeds, etc. out of reach of children and pets, and away from food and animal feeds.

Any symptoms of illness during or after using chemicals should be treated according to the supplier's/manufacturer's recommendations. If severe, **call a physician or get the patient to hospital immediately**. Keep the container and/or label for reference.

Avoid High Pressure Fluids

Avoid any contact with fluids leaking under pressure, because the fluids can penetrate the skin surface.

Any fluid which penetrates the skin, will need to be **removed immediately by a medical expert.** Seek specialist advice on this type of injury.



Relieve the pressure before disconnecting any hydraulic or other lines. Make all repairs and tighten all fittings before re-connection to pressurised fluid.

Keep your hands and body away from any pinholes or high pressure jets. Search for leaks with a piece of cardboard instead of using your hand directly.

Safe Work Practices

All farm machinery is potentially dangerous and should be treated with caution and respect.

Before starting the machine, ensure that all controls are placed in neutral and that bystanders are well clear. Check that the guards have been securely fitted and that any adjustments have been made correctly.

Where possible, disconnect or isolate the drive mechanism to the implement. Lower the machine onto the ground when not in use.

Do not operate this equipment when severe weather conditions appear imminent.

SAFETY - General (Continued)

WARNING

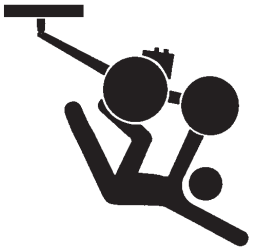
Practice Safe Maintenance

Keep the machine in safe working condition. Routine maintenance and regular servicing will help reduce risks and prolong the life of the machine.

General Maintenance

Accidents occur most frequently during servicing and repair. The following general rules must be followed when maintaining or working with machinery:

- All operating and maintenance manuals must be read before and referred to while using or servicing any piece ofequipment.
- Turn off all machinery power sources and isolate the machine before making adjustments, doing lubrication, repairs or any other maintenance on the machine.
- Ensure that the machine hydraulics are disconnected from the power source.
- Wear gloves when handling components with cutting edges, such as any ground cutting components.
- Beware of hazards created by springs under tension or compression when dismantling or maintaining the machine.
- It is recommended that you clean the machine with a water blaster or similar apparatus before commencing maintenance.



Make Sure the Machine is Well Supported

When machinery is fitted with hydraulics, do not rely on the hydraulics to support the machine. During maintenance or while making adjustments under the machine, always lock the hydraulics and support the machine securely. Place blocks or other stable supports under elevated parts before working on these.

Electrical Maintenance

Disconnect the electrical supply from the tractor before doing any electrical maintenance.

CAUTION

Welding

With electronic equipment in modern tractors it is advisable to disconnect the machine from the tractor, or at least disconnect the alternator and battery before attempting any welding.

CAUTION

Use Only Genuine Spare Parts

Unauthorised modifications or non-genuine spare parts may be hazardous and impair the safe operation and working life of the machine.

Excess lubricants must be disposed of safely so as not to become a hazard.

SAFETY - Machine Specific

This section of the manual gives specific guidelines for the safe operation of the SLR Feeder.
These guidelines were current at the time of publication, but may be superseded by later circumstances. They do not necessarily cover every possible hazard and must be read in conjunction with the **SAFETY - General** section (Page 4 - 8).

Hazard Points on the SLR Feeder

The lists below are not all-inclusive and serve only to highlight the more obvious areas of risk.

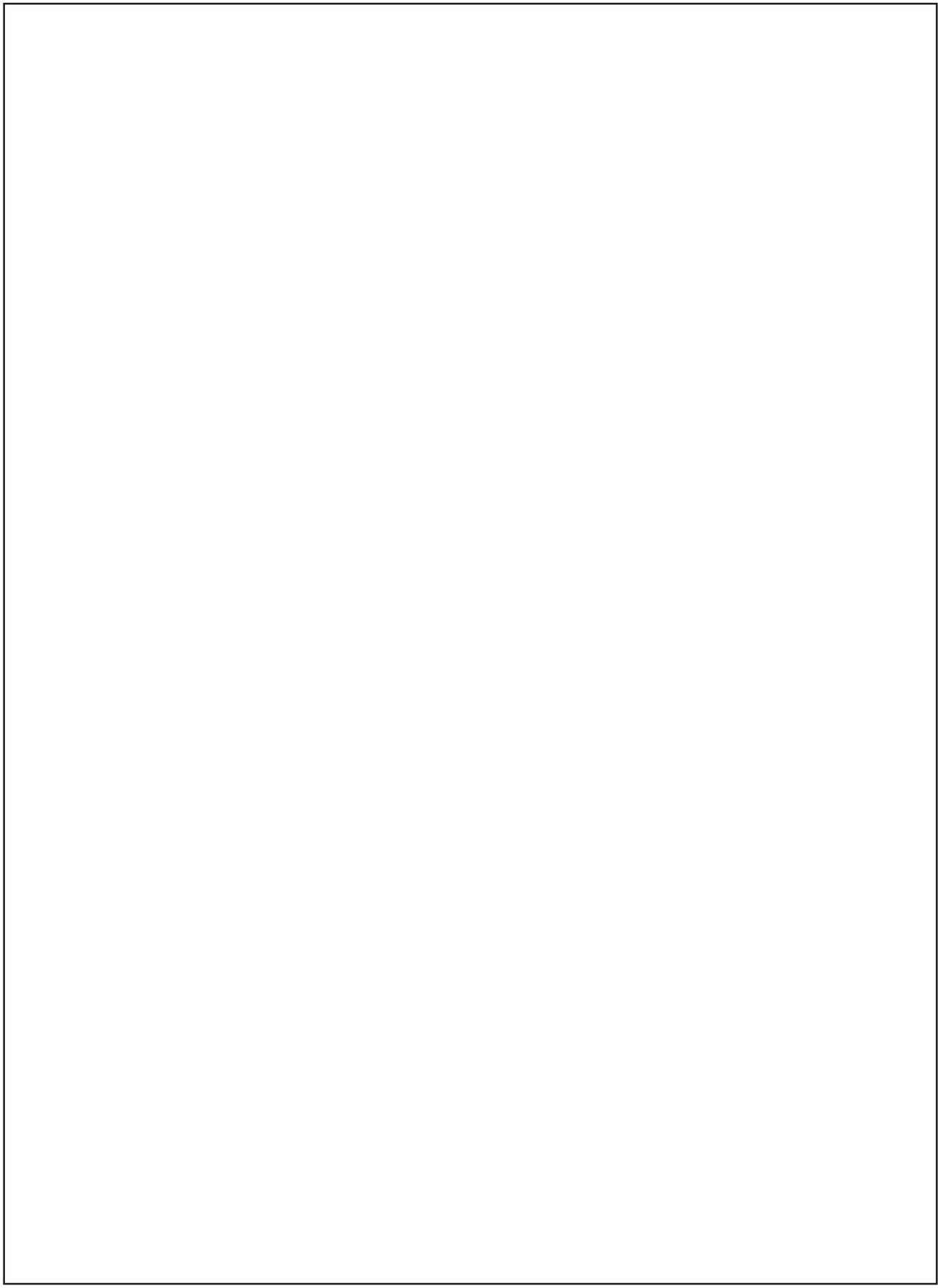
The decals attached to the machine are a general reminder that there are hazardous areas on the machine, rather than specifically highlighting all possible hazards.
For decal locations on machine, refer Page 11.

No Ride
Passengers are not permitted anywhere on the machine.

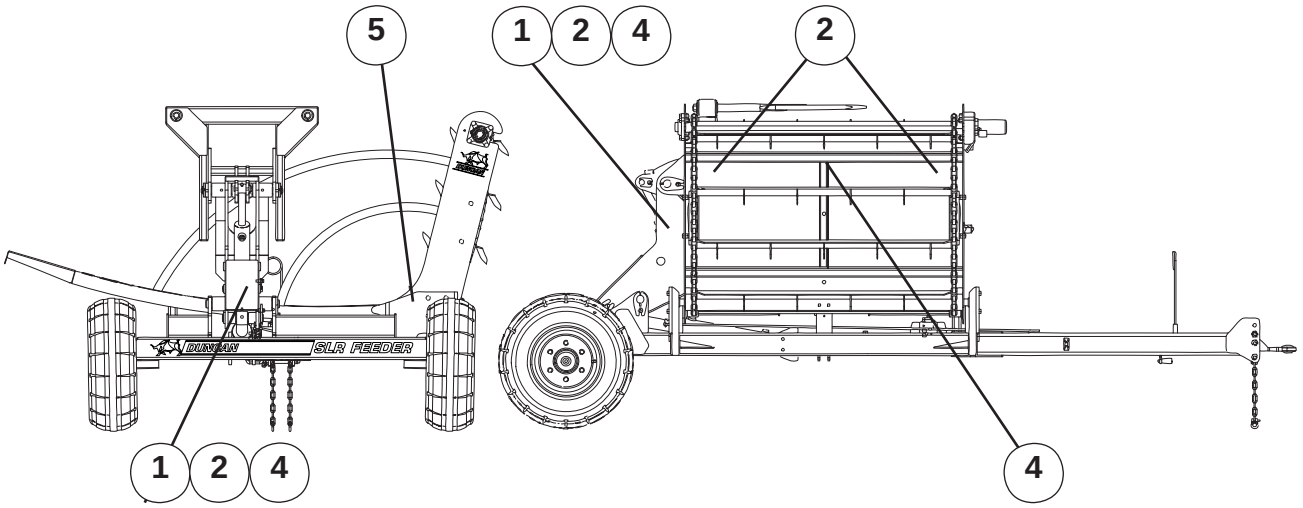
Pinch Points/Moving Parts
Hazardous areas include:
- Elevator chains and sprockets.
- Hydraulic motor and torque arm.
- Loading arm.
- Fork loading system.
- Feedout bed.
- Hydraulic cylinders on the bed, frame and fork system.

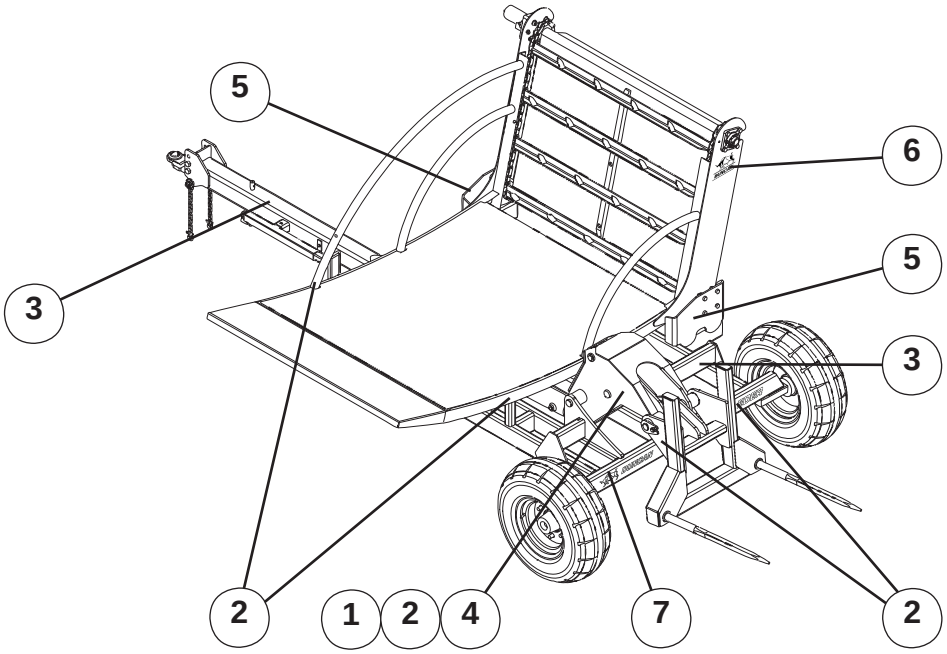
Slippery When Wet
Hazardous areas include:
- Feedout Bed
- All smooth surfaces on the frame structure.

Keep Clear
Hazardous areas include:
- Between the tractor and SLR Feeder.
- Immediately adjacent to the SLR Feeder chain side.



SAFETY - Machine Specific (Continued)
Safety Decals





Item	Decal/Guard	Cross Ref.	Pt. No.	Qty
1	'No Ride'	Refer Page 9	43900	3
2	'Pinch Point/Moving Parts'	Refer Page 9	43901	5
3	'Slippery When Wet'	Refer Page 9	43902	2
4	'Keep Clear'	Refer Page 9	43904	2
5	'40 km/hr'	-	43912	2
6	Duncan Bull	-	61525	2
7	Duncan SLR Feeder	-	61524	1

Road Transport

CAUTION

1 Raise the Bale Forks into the transport position.

2 Locate jack stand in transport position.

3 Ensure lighting and oversize warning requirements meet recommendations published by the local Land Transport Authority or equivalent. The Feedout Bed extension is removable if required.

CAUTION

4 **Maximum towing speed 40 km/hr**.
For countries other than New Zealand different speed restrictions may apply, please refer to your local transport authority.

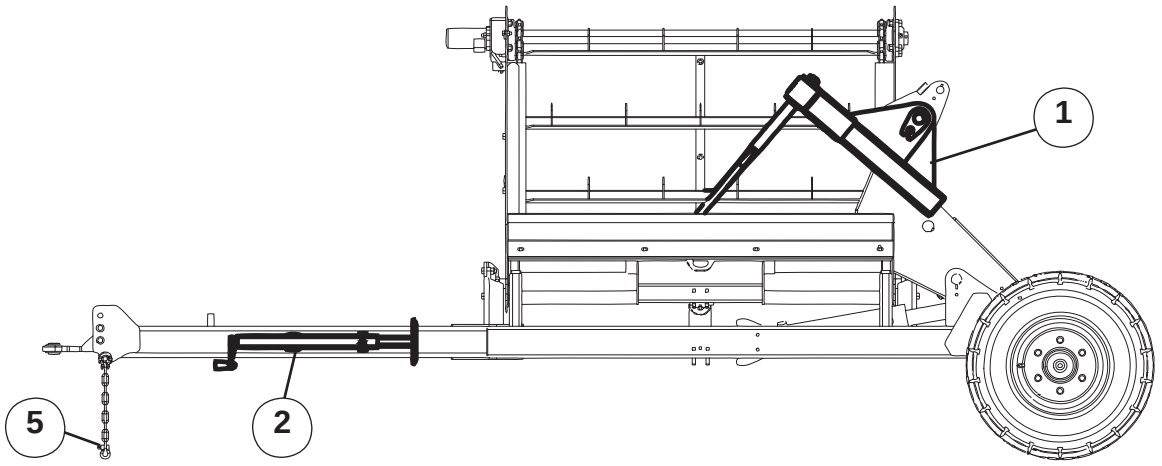
Ensure towing vehicle requirements are adequate for the towed vehicle e.g. mass, brakes. Refer to recommendations published by the local Land Transport Authority or equivalent.

Braking when towing can cause the load to jackknife. Use extra care when towing in adverse conditions such as mud, inclines and sharp bends.

Lower towing speeds are recommmended on farm roads/ tracks and where one wheel is on or over a road verge.

WARNING

5 **Attach safety chains to tractor.**
Safety chains must be crossed over underneath the coupling and attached to the towing vehicle. The attachment points must be as close as practical to the towing coupling and one each side.The towbar on the towing vehicle must be rated for the towed mass. **Do not remove or replace the safety chains provided with any other than those specified in the parts manual.**
Note: The safety chains are provided with sufficient length to cater for all towing vehicles. Safety chains must be shortened by cutting off excess length so that if the coupling fails the drawbar will not hit the ground.



Operation

Attaching machine to tractor

1. Use the jackstand to align the hitch point with the tractor For correct operation, the machine should be parallel to the ground. The machine coupling may be adjusted to accomodate different tractior drawbar heights.

2. Reverse the tractor into position and locate the hitch pin into the drawbar ensuring that the safety linch pin is in place.This is to prevent the machine from accidentaly detaching from the tractor.

3. Locate the jackstand in the transport position.

4. **Warning:** Attach safety chains between tractor and the machine. Safety chains will help to control drawn equipment should it accidentally separate from the drawbar whilst in transport or operation.

5. Place the hydraulic hoses into the correct tractor outlets. Ensure that all moving parts of the machine are free from obstacles and run and check the functions of the machine.

Warning: Ensure people and animals are at a safe distance away from the moving parts before running the machine.

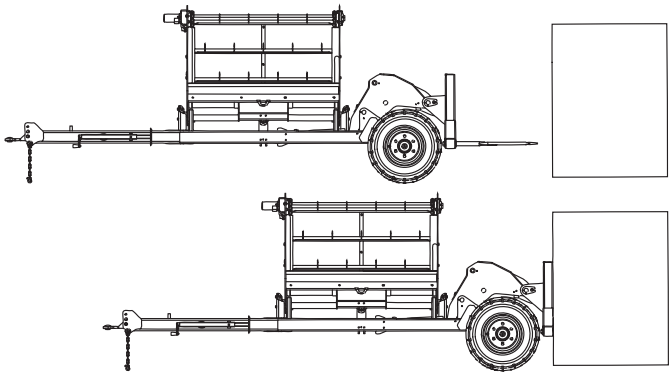
Detaching Machine from Tractor

1. Reverse the machine into your storage area. Where possible, retract all hydraulic rams.

2. Turn the jackstand to the vertical postion and lock in place. Take the load off the drawbar and remove hitch pin and safety chains as required.

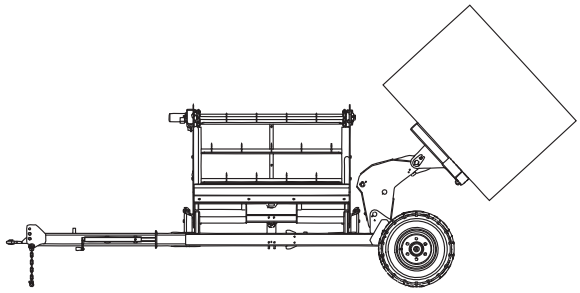
3. Release pressure and dissconnect hydraulic hoses, close tractor outlet covers and install dust covers over the hose ends.

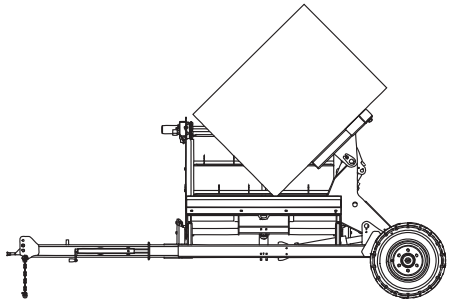
Loading a Bale



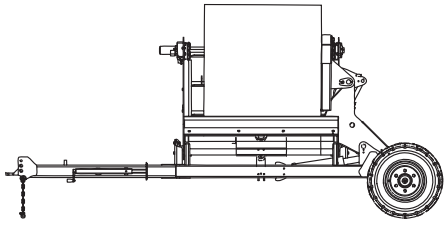
1. Lower rear forks to their lowest position refering to the position indiactor on the top of the drawbar as a guide. For larger bales, the forks may be raised slightly as required.

2. Reverse to spear the bale all the way.

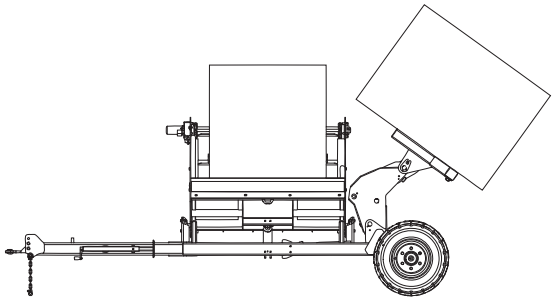


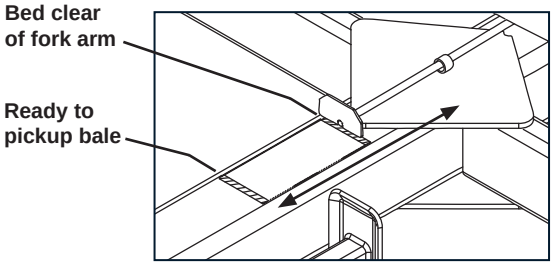


3. Lift the bale and bring to the desired position for unwrapping. For looser bales, cut the strings/unwrap with the bale closer to the bed to prevent the bale from falling apart. A loop is provided under the bed extension to tie the cut string to if the bale is sitting on the original knots and cannot be pulled free. Tying the strings to the machine will prevent the strings from getting wrapped around the elevator chain.



4. Lower the bale onto the feedout bed.
5. The forks will retract and reset to the loading position.
6. If required, a second bale may be loaded and held with the lift arm close to vertical. Use the postion indicator (see below) on the drawbar as a guide if the arm is obscured by the previously loaded bale.

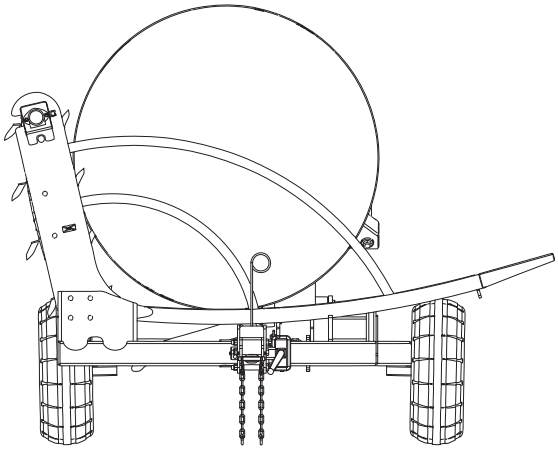


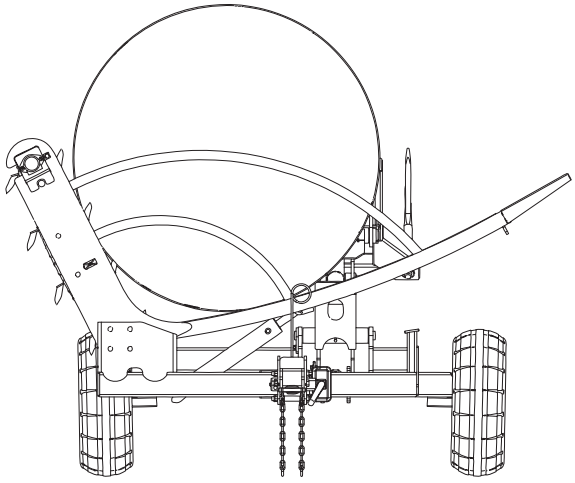


Feeding Out

CAUTION

1. Ensure that all plastic wrapping, mesh and loose string has been removed.
2. If a second bale is on the forks, ensure that the forks are in the correct positon to allow the bed to tilt and feedout. Look at the fork position indicator on the drawbar and move the forks back if required. (See previous page)
3. The bed may be tilted when feeding out to alter the delivery. The elevator chain tines are aggresive enough to tear the bale.
4. Round bales rotate and unwrap depending on the original bale winding direction. If too much is being fed out, tilt the bed back to allow the chains to create a flat on the bale; that will stop it from rotating and unwinding too much.
5. Experiment with the machine and note the different effects depending on which way round the bale was loaded and the various types and ages of feed.
6. If the elevator chain speed is too fast or too slow, you may need to alter the flow control on the tractor remotes.
7. When feeding out on hillsides, keep the elevator on the high side of the hill; this reduces the risk of roll-over and gives better control of the bale.





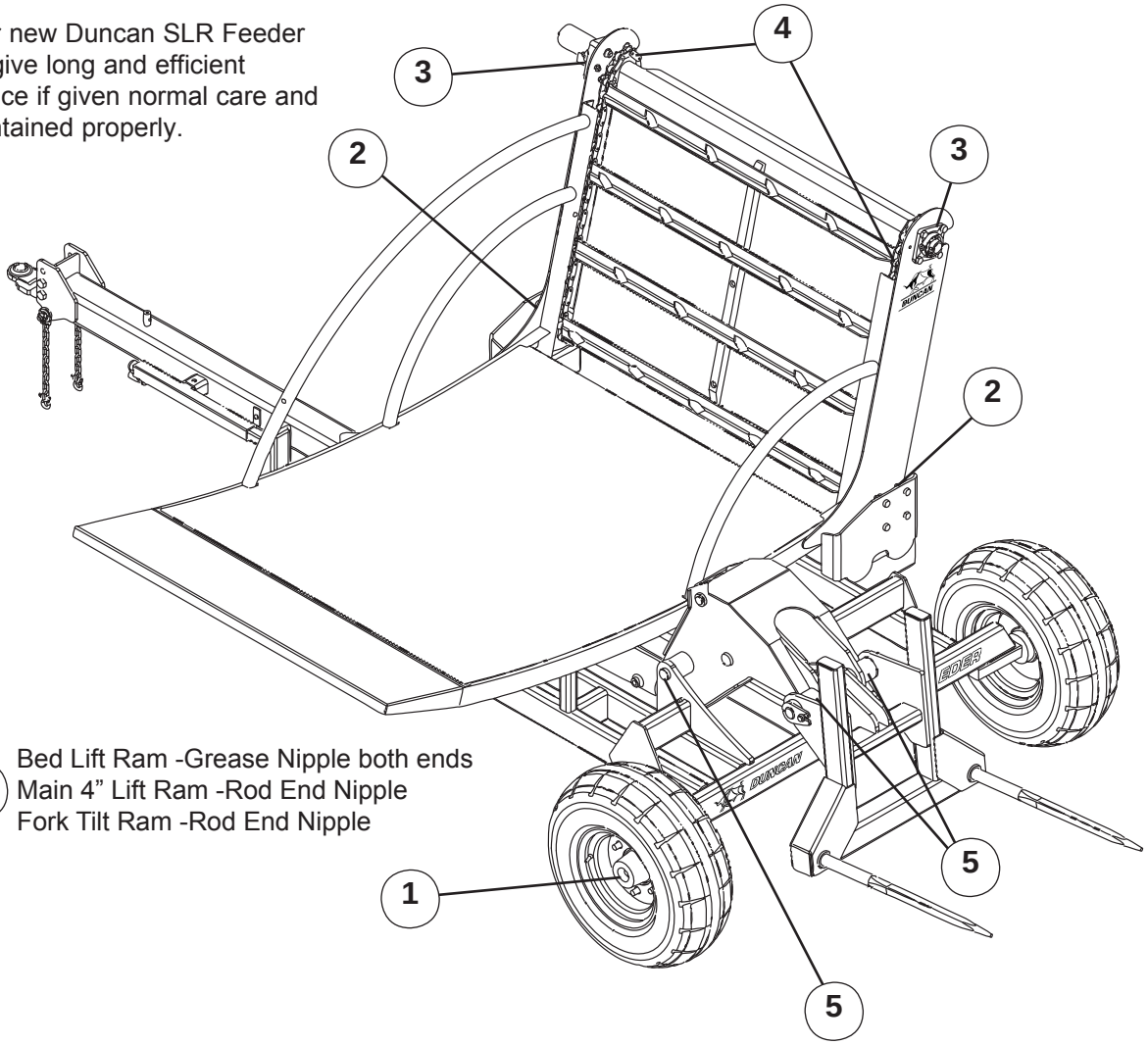
Maintenance & Care - Lubrication Instructions

Precautions with Grease

Greases should not be mixed as the structure may be weakened by the mixes of different types of thickener, which may cause softening and loss of grease from the bearings by running out.

CAUTION

Your new Duncan SLR Feeder will give long and efficient service if given normal care and maintained properly.



6 Bed Lift Ram -Grease Nipple both ends
Main 4” Lift Ram -Rod End Nipple
Fork Tilt Ram -Rod End Nipple

Lubrication Chart

Item	Components	Lubricant	Frequency
1	Wheel Bearings	Castrol LMX Grease	Annually
2	Bed Pivot Bearings	Castrol LMX Grease	6 Monthly
3	Elevator Chain Bearings	Castrol LMX Grease	Every Month
4	Elevator Chain	Suitable Roller Chain Lubricant	6 Monthly
5	Pivot Pins	Castrol LMX Grease	Weekly
6	Cylinder Pivots	Castrol LMX Grease	Weekly

* The lubrication frequencies are only a guide. Actual frequency will be dependent on extent of use and ground conditions.

Maintenance & Care - Lubrication Instructions

Precautions with Grease

Greases should not be mixed as the structure may be weakened by the mixes of different types of thickener, which may cause softening and loss of grease from the bearings by running out.

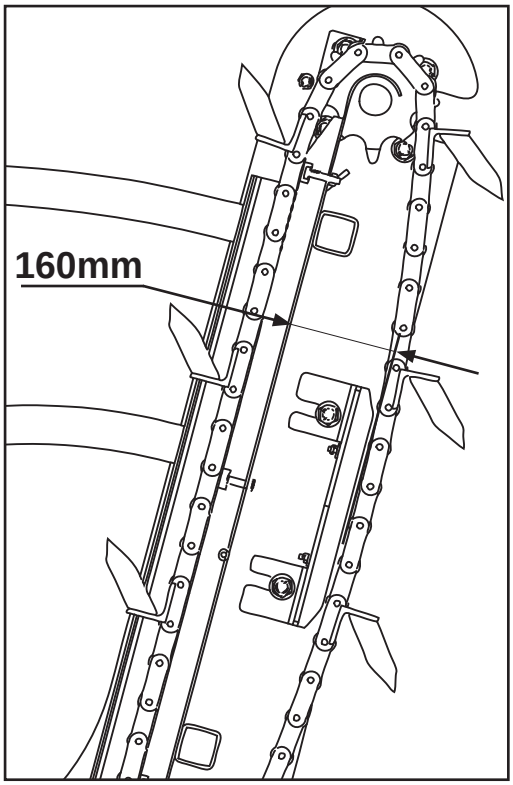
CAUTION

Components	Weekly	Monthly	Pre Season
Wheel Nuts	●	●	●
Ram & Pivot Pin Fasteners	●	●	●
Coupling & Safety Chains	●	●	●
Y Bearings		●	●
Roller Chains		●	●
Hydraulics (Oil Leaks)		●	●
Tyre Pressures (see page 3)		●	●
Bolted Connections	●	●	●

Mechanical Adjustments

Elevator Chain Tension Settings

1. Check the elevator chain tension after the 1st month of operation, and therafter monthly depending on use.
2. To adjust the elevator chain tension first disconnect all hydraulic hoses from the tractor. Loosen the tension bolts and, using a pry bar, set the tensioner blocks against the chain to the dimension shown. WARNING: The tine points are sharp and at eye level.

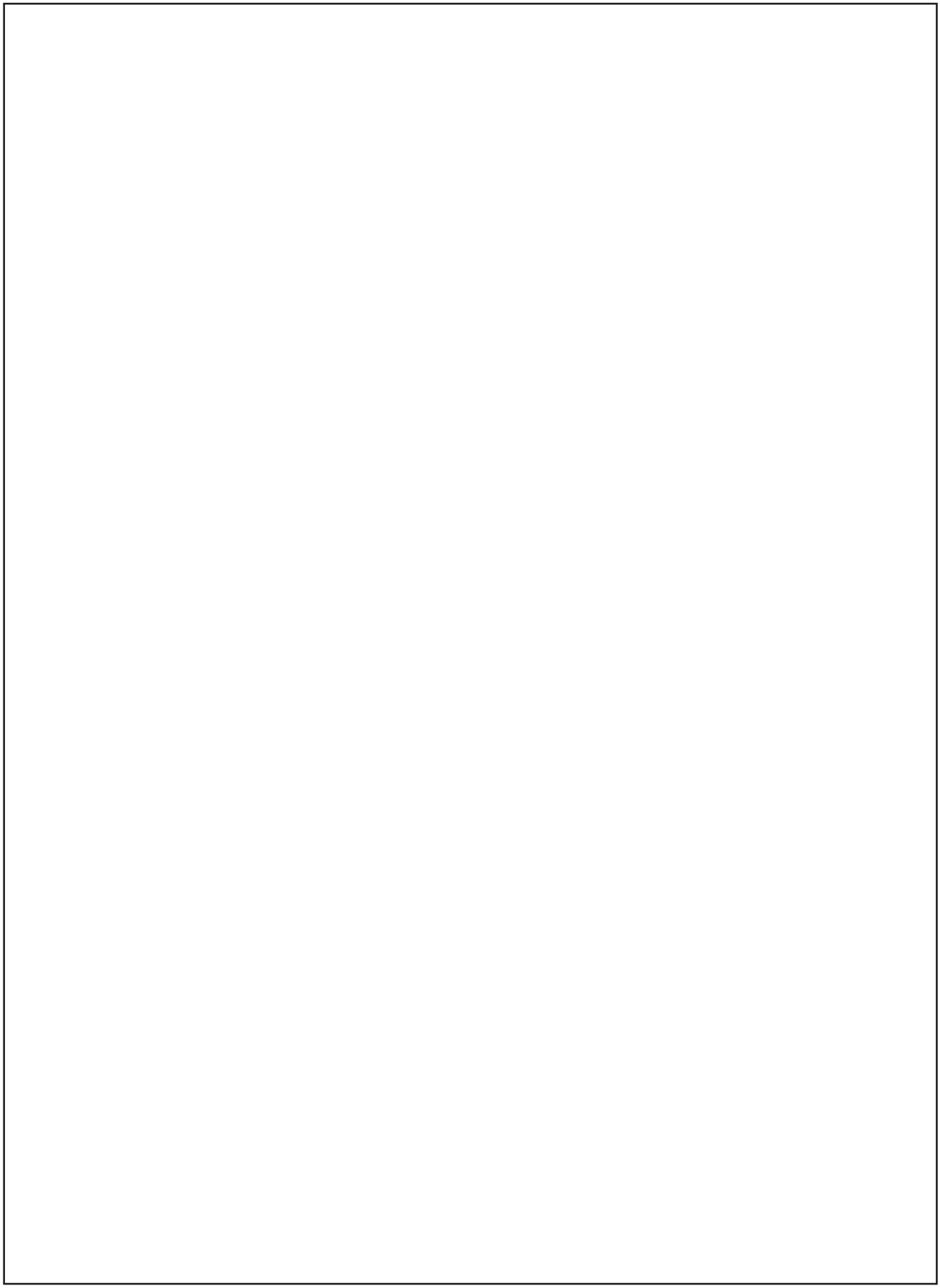


Storage

Before storage, water blast the machine and remove mud and excess feed which may have accumulated during the season. Check that the elevator chain shaft is not wrapped with material. Elevator chains should have an excess of oil applied to them. Run the machine and repeat this operation to ensure the chains are well lubricated and any contaminants have been flushed out. Remove excess oil from the bed. Lubricant can be clean used hydraulic oil or transmission oil.

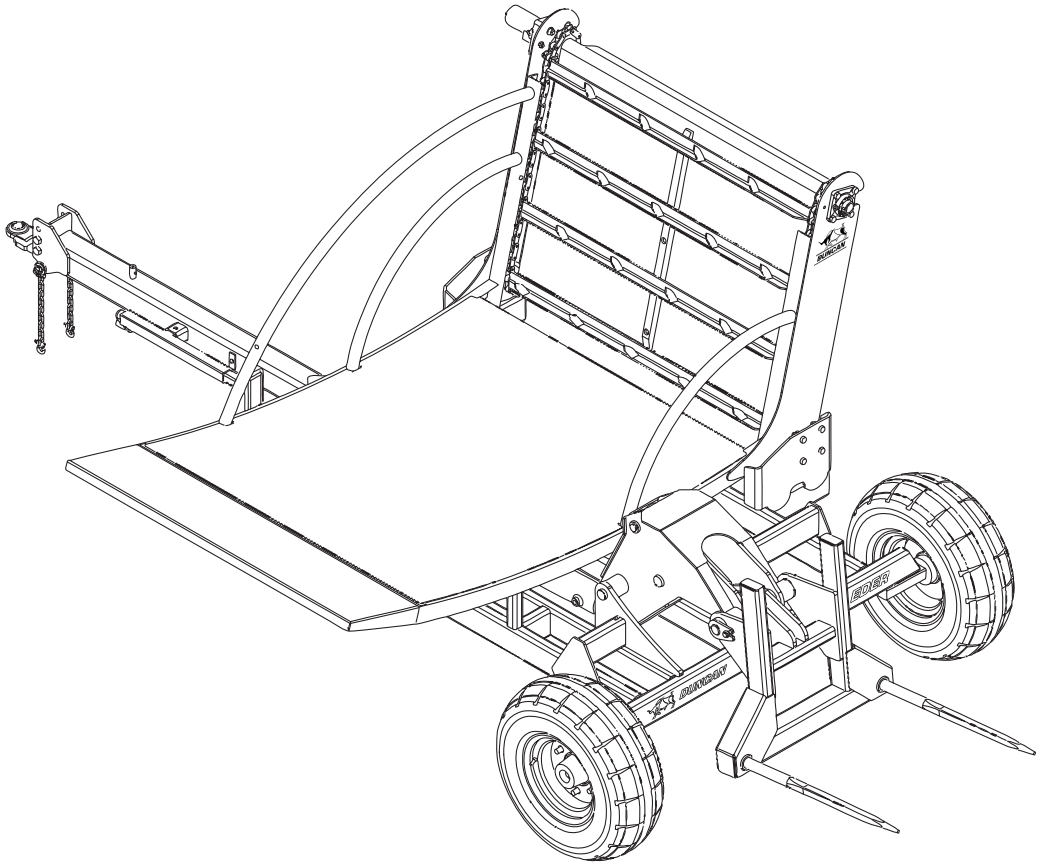
The machine should be stored with the rams retracted to ensure the rods are protected.

SLR Feeder Maintenance Notes



Parts List

‘SLR Feeder’



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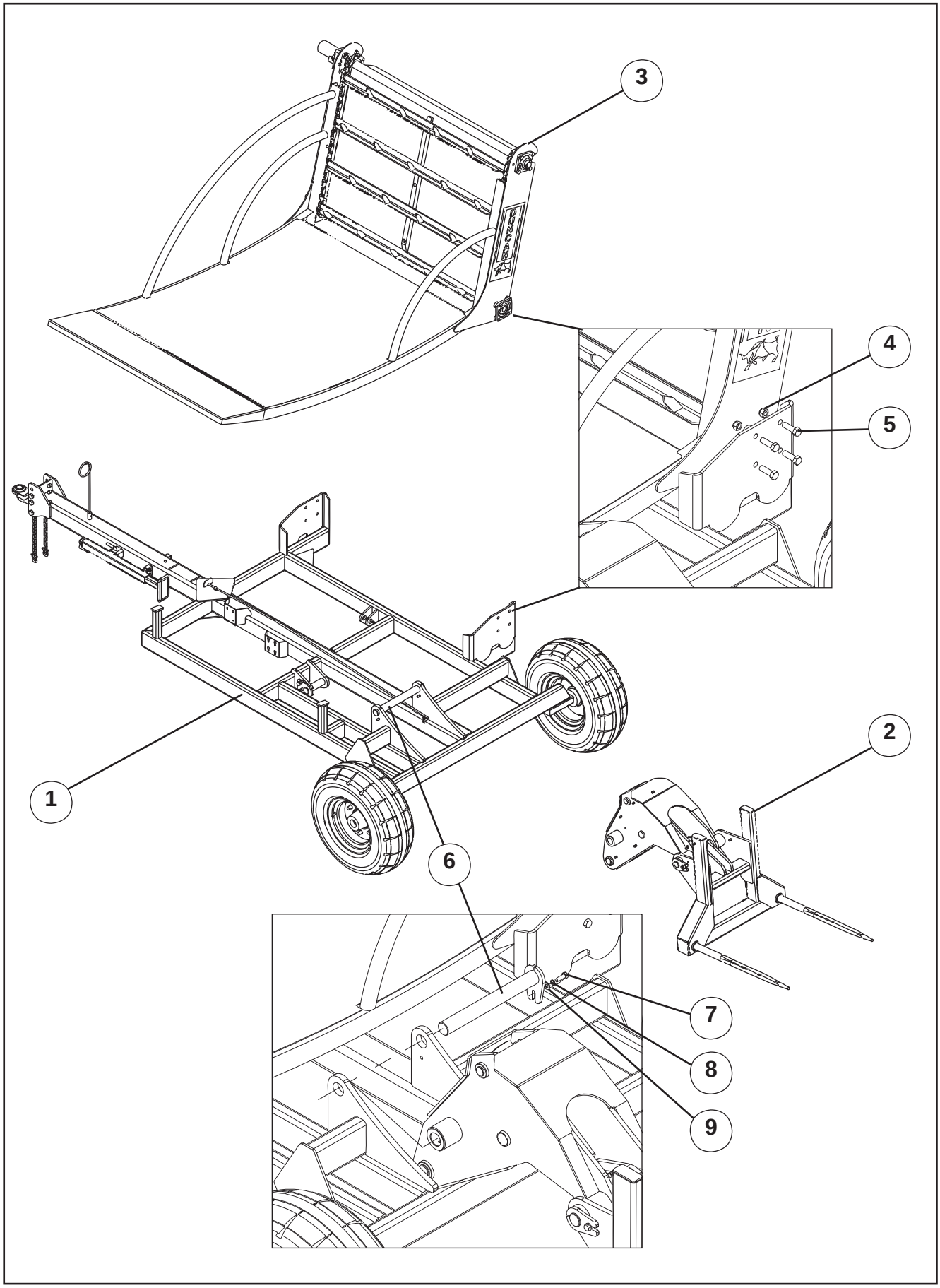
Pt. No. 67368
Issue 0510

‘SLR Feeder’ Assembly

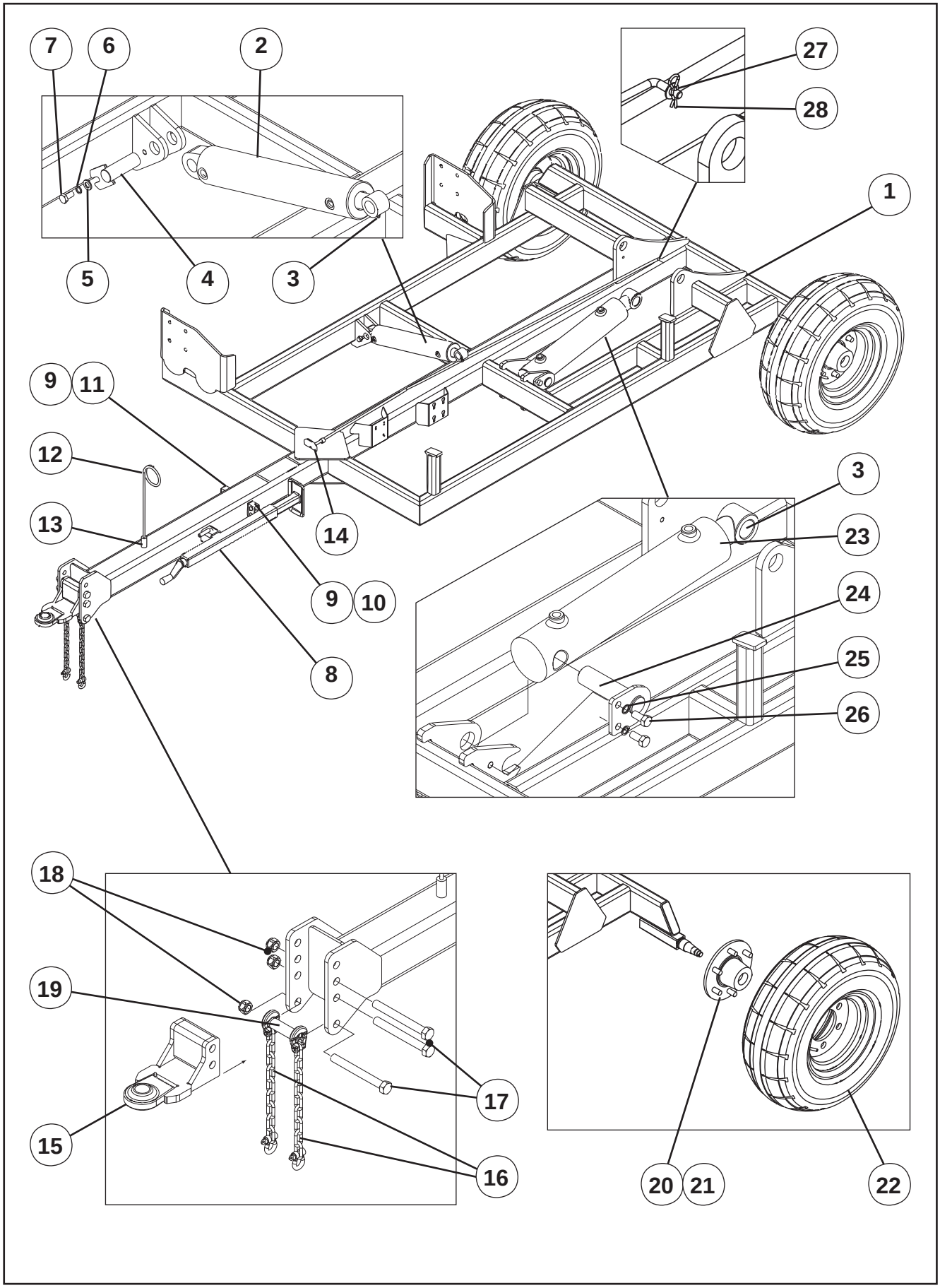


‘SLR Feeder’ Assembly

ITEM	PART No.	DESCRIPTION	QTY
1	Refer Page 24-25	Machine Base	1
2	Refer Page 26-27	Forks System	1
3	Refer Page 28-31	Bed System	1
4	45140	M16 Nyloc Nut	8
5	45040	M16 X 50 8.8 Z/P Bolt	8
6	61337	Pivot Pin Forks System	1
7	45020	M12 x 35 8.8 Z/P Bolt	1
8	45167	M12 Spring Washer	1
9	45159	M12 HD Flat Washer	1

For clarity, hydraulic rams are shown on the ‘Machine Base’, ‘Forks System’ and ‘Bed System’ pages respectively

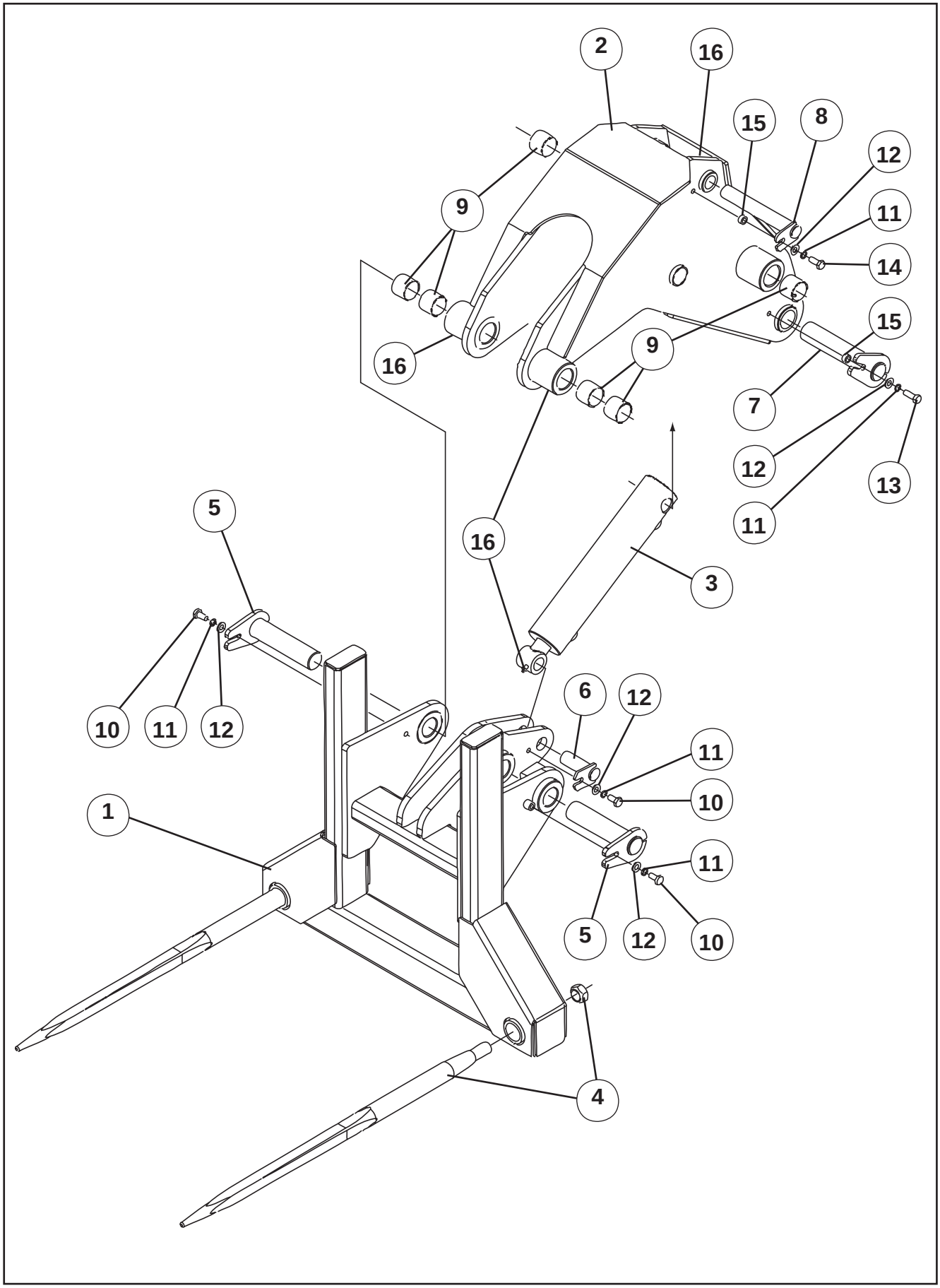
‘SLR Feeder’ Machine Base



‘SLR Feeder’ Machine Base

ITEM	PART No.	DESCRIPTION	QTY
1	61343	Chassis Welded Assembly	1
2	61355	Hydraulic Cylinder 3” x 1.5” x 375mm Stroke	1
3	43118	Straight Grease Nipple M8	2
4	61336	Pivot Pin	1
5	45159	M12 HD Flat Washer	2
6	45167	M12 Spring Washer	2
7	45018s	M12 x 25 8.8 Z/P Setscrew	1
8	31478	Jackstand 2500kg	1
9	43660	Double Tube Clamp	3
10	44965	M8 x 45 8.8 Bolt Z/P (Spares only)	1
11	45677	M8 x 80 8.8 Bolt Z/P (Spares only)	1
12	4800315	Hose Support	1
13	45181	M8 x 12 S/H Grub Screw	1
14	61516	Indicator Rod Welded Assembly	1
15	61315	Drawbar Hitch	1
16	43830	Safety Chain No.2	2
17	45078	M20 x 180 8.8 Z/P Bolt	3
18	45141	M20 Nyloc Nut	3
19	61522	Spacer	1
20	61323	Hub with bearings- 6 Stud 50mm	2
21	Call	Hub Rebuild Kit	1
22	45639	Wheel Assembly 10.0/75-15.3 6 Stud 10 Ply	2
23	61356	Hydraulic Cylinder 4” x 2.5” x 355mm Stroke	1
24	61335	Ram Base Pin	1
25	45168	M16 Spring Washer	2
26	45037s	M16 x 35 8.8 Setscrew	2
27	45152	M10 Light Flat Washer	1
28	45271	R Clip	1

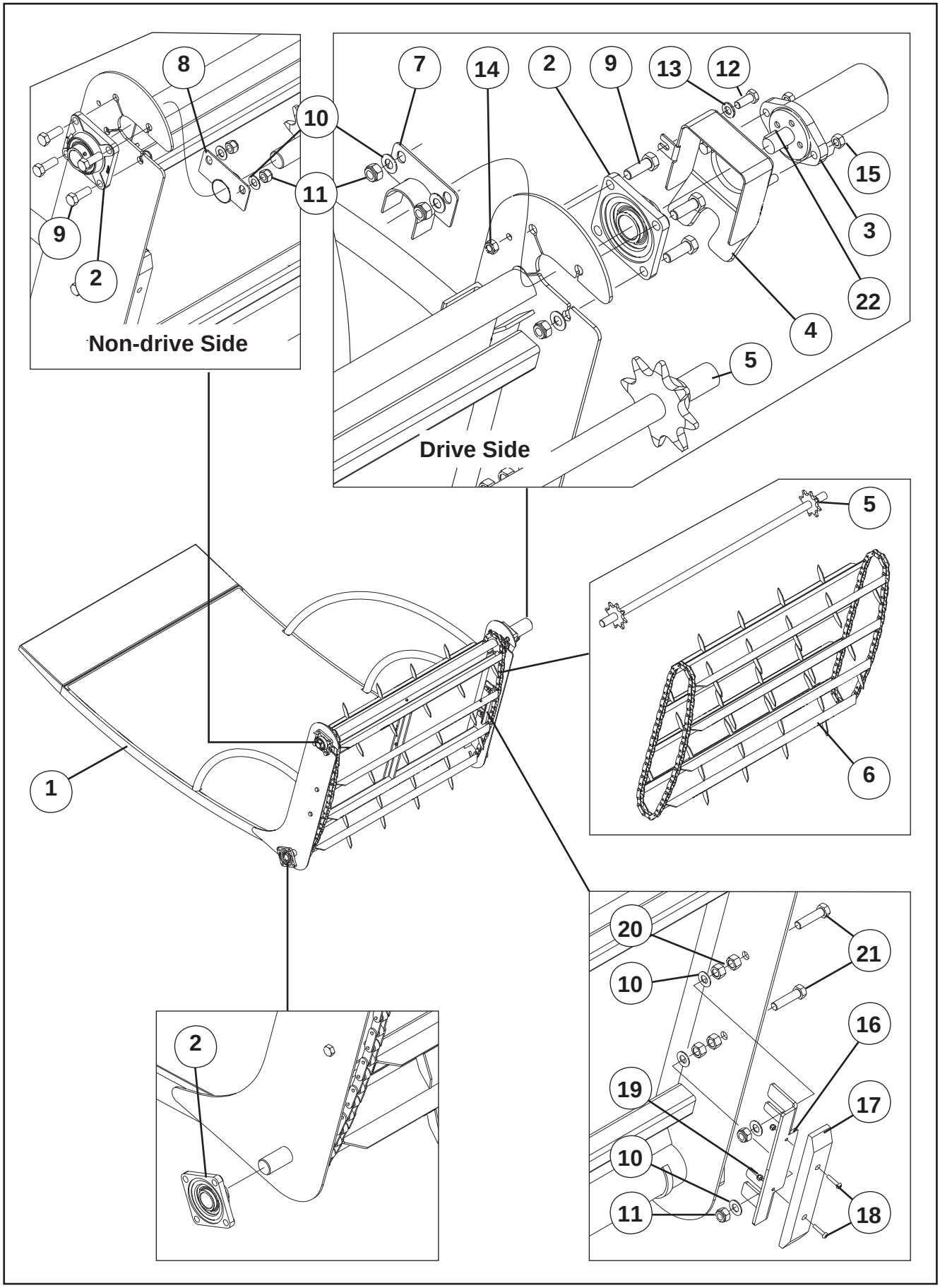
‘SLR Feeder’ Forks System



‘SLR Feeder’ Forks System

ITEM	PART No.	DESCRIPTION	QTY
1	61384	Forks Frame Welded Assembly	1
2	61320	Forks Lift Arm Welded Assembly	1
3	61357	Hydraulic Cylinder 3” x 1.5” x 270mm Stroke	1
4	43169	Bale Tine Conus II 980mm Long with Nut	2
5	61340	Forks Pivot Pin	2
6	61336	Fork Ram Pin	1
7	61338	Main Ram Pin	1
8	61339	Fork Ram Base Pin	1
9	43426	Glacier Bush	6
10	45019s	M12 x 30 8.8 Setscrew Z/P	3
11	45167	M12 Spring Washer	5
12	45159	M12 HD Flat Washer	5
13	45022	M12 x 45 8.8 Bolt Z/P	1
14	45021	M12 x 40 8.8 Bolt Z/P	1
15	61436	Tab Anchor Spacer	2
16	43118	Straight Grease Nipple M8	4

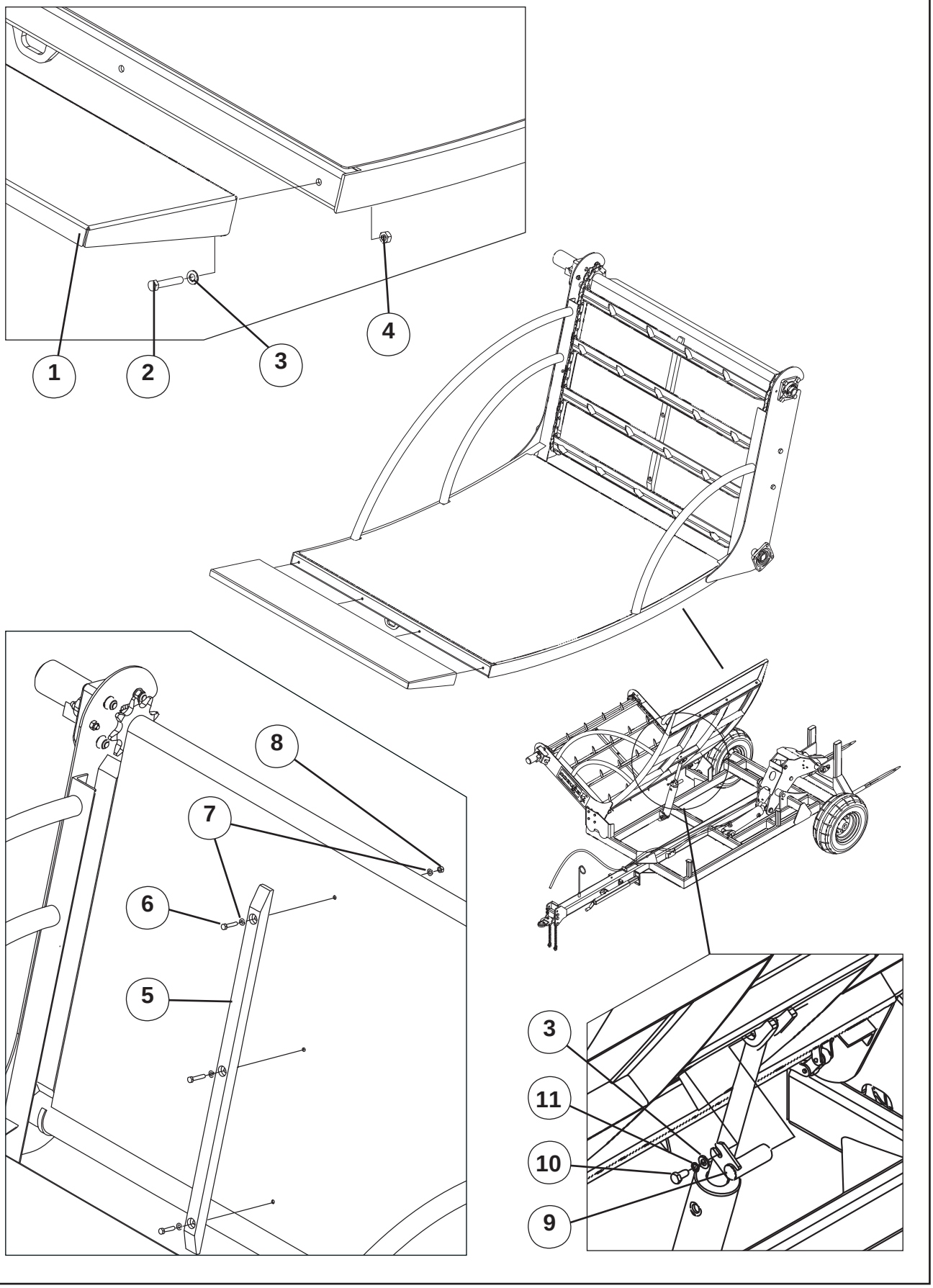
‘SLR Feeder’ Bed System Drive



‘SLR Feeder’ Bed System Drive

ITEM	PART No.	DESCRIPTION	QTY
1	61327	Bed/Elevator Welded Assembly	1
2	43986	Y Bearing	4
3	30444	Hydraulic Motor 2 Bolt	1
4	61398	Motor Mount/Torque Arm Assembly	1
5	61397	Top Shaft Welded Assembly	1
6	61395	Chain Welded Assembly	1
7	61500	Shroud – Drive Side	1
8	61504	Shroud – Non-drive Side	1
9	45039	M16 x 45 8.8 Bolt Z/P	8
10	45154	M16 Light Flat Washer	16
11	45140	M16 Nyloc Nut	12
12	45419	M10 x 30 8.8 Bolt Z/P	1
13	45158	M10 HD Flat Washer	1
14	45138	M10 Nyloc Nut	1
15	45139	M12 Nyloc Nut	2
16	61396	Tensioner Mount	2
17	34082	Chain Rubbing Block	2
18	45911	M6 x 30 Pan Pozi Screw Z/P	4
19	45136	M6 Nyloc Nut	4
20	45132	M16 Nut 8.8 Z/P	8
21	45043s	M16 x 65 8.8 Setscrew Z/P	4
22	30433	Key 1/4” x 1” Woodruff No. 808	1

‘SLR Feeder’ Bed System

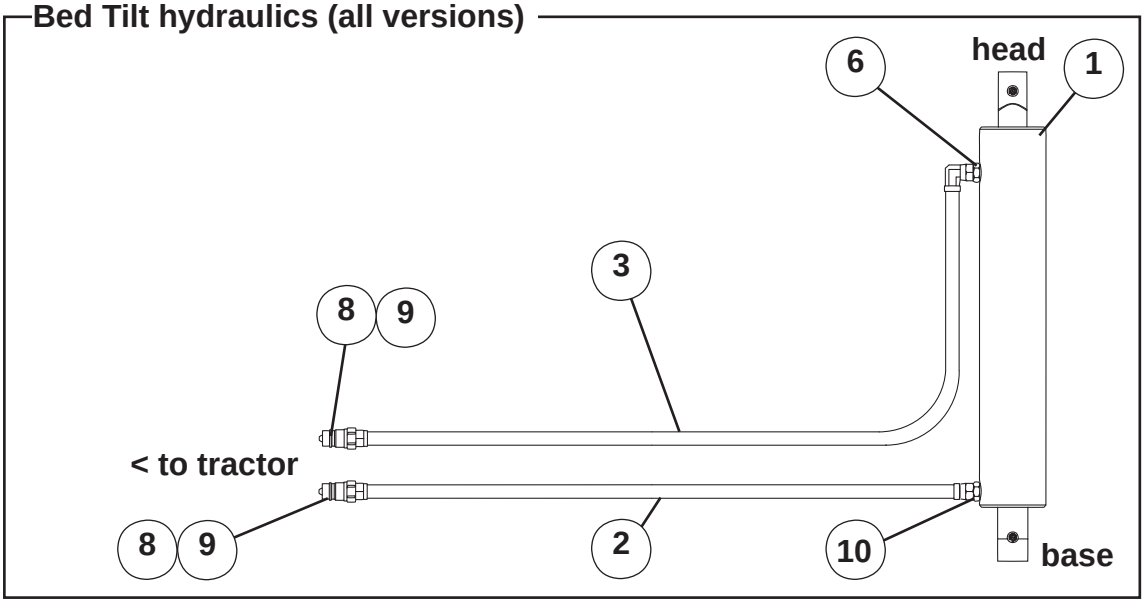


‘SLR Feeder’ Bed System

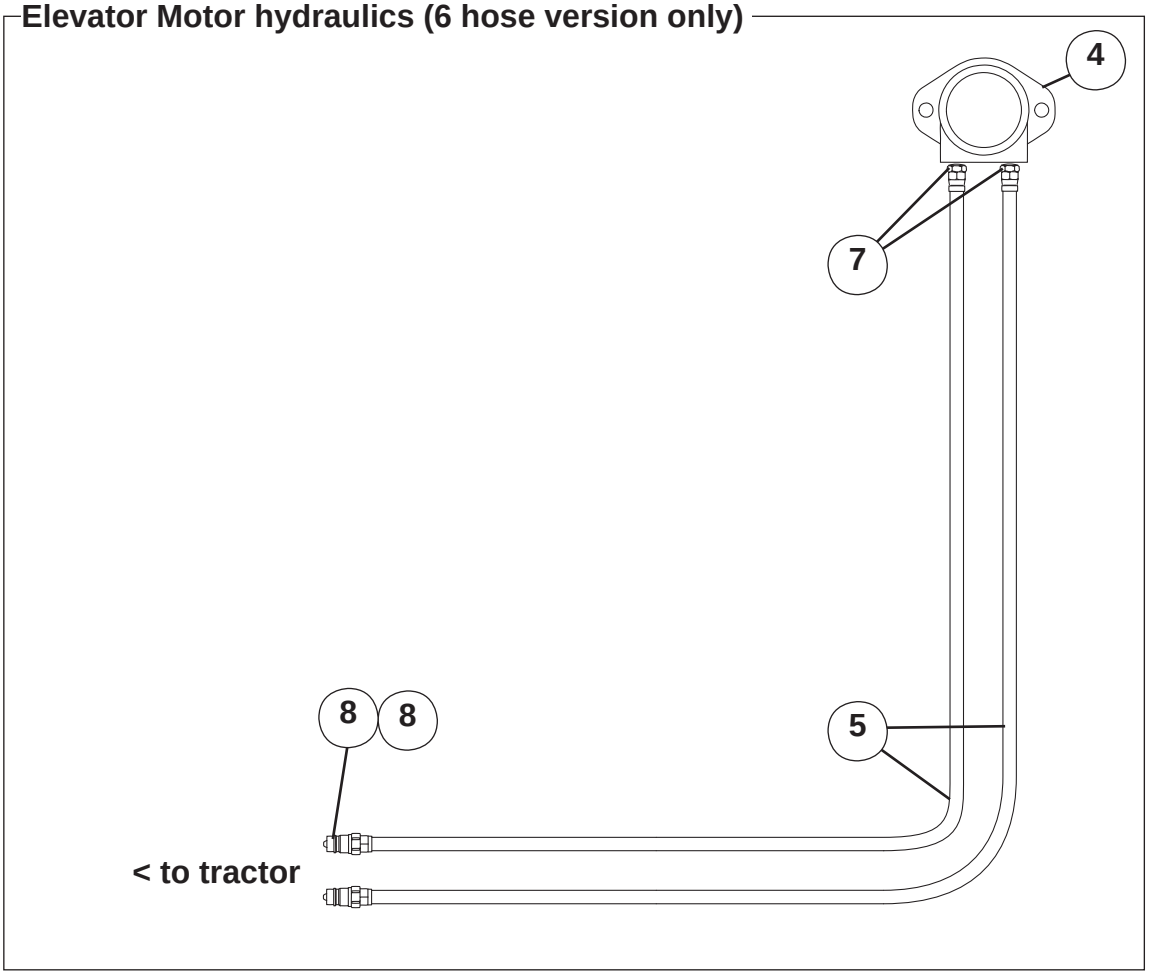
ITEM	PART No.	DESCRIPTION	QTY
1	61318	Bed Extension	1
2	45027	M12 x 70 8.8 Bolt Z/P	4
3	45159	M12 HD Flat Washer	5
4	45139	M12 Nyloc Nut	4
5	61496	Floor Wearstrip	1
6	44965	M8 x 45 8.8 Bolt Z/P	3
7	45157	M8 HD Flat Washer	6
8	45137	M8 Nyloc Nut	3
9	61336	Bed Ram Pin	1
10	45018s	M12 x 25 8.8 Setscrew Z/P	1
11	45167	M12 Spring Washer	1

‘SLR Feeder’ 6 hose Hydraulics

Bed Tilt hydraulics (all versions)



Elevator Motor hydraulics (6 hose version only)

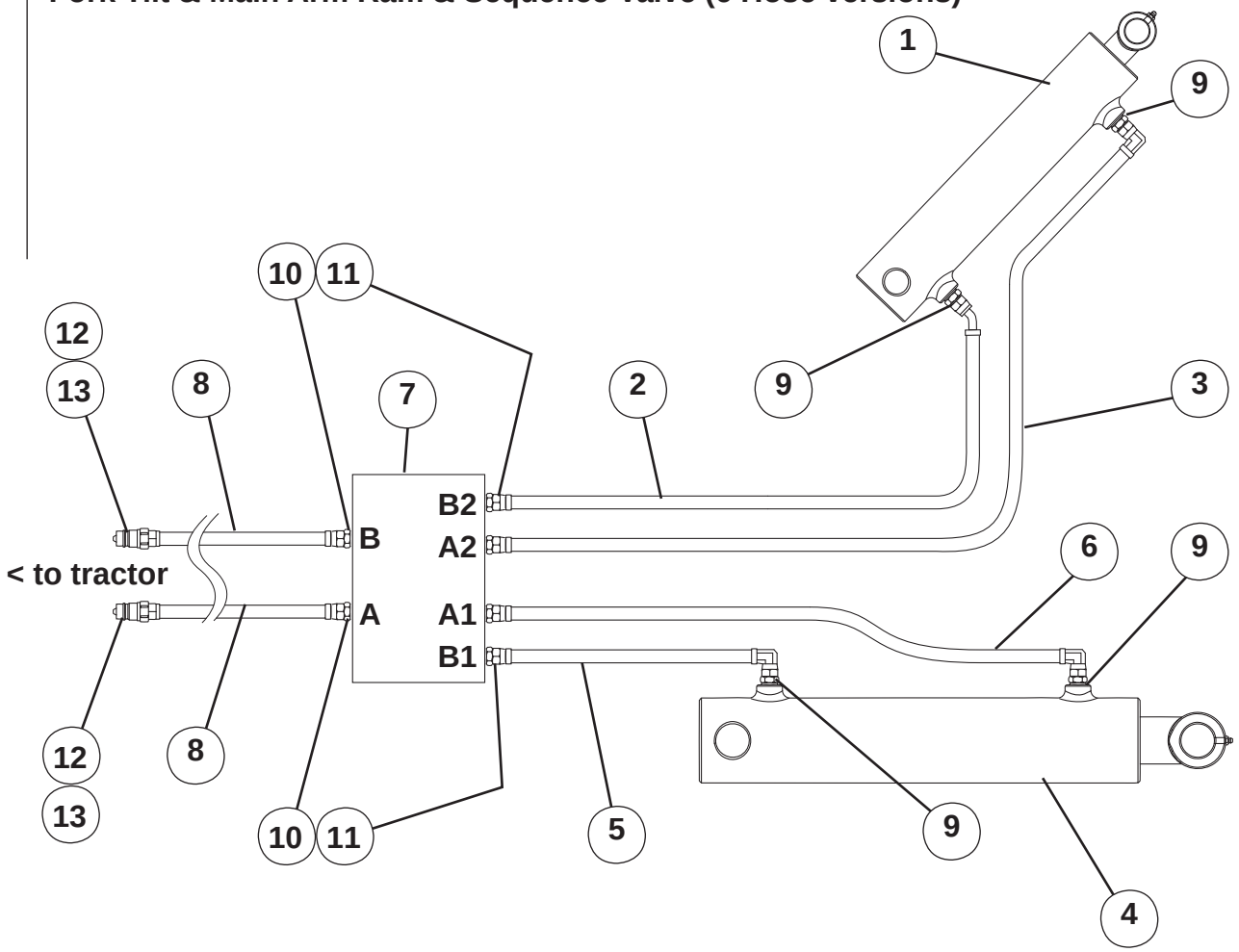


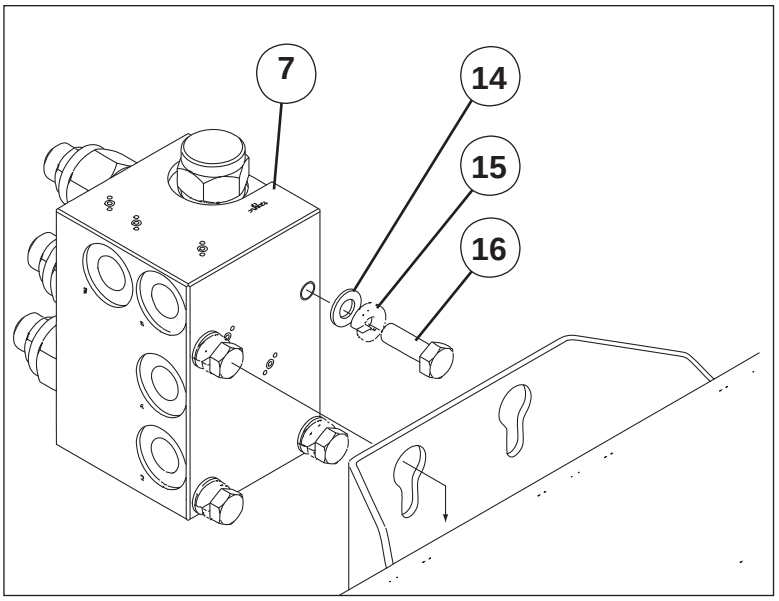
‘SLR Feeder’ Hydraulics

ITEM	PART No.	DESCRIPTION	QTY
	Bed Tilt Hydraulics		
1	61355	Bed Tilt Ram (see Page 30)	1
2	61530	Hydraulic Hose 4.50m long (Colour Code Yellow)	1
3	61531	Hydraulic Hose 4.62m long (Colour Code Yellow)	1
	Elevator Motor Hydraulics		
4	30444	Hydraulic Motor 2 bolt	1
5	61532	Hydraulic Hose 5.00m long (Colour Code Red)	2
	Fittings		
6	43280	Nipple 3/4” UN'O to 3/8” BSPP	1
7	43035	Nipple 7/8” UN'O to 3/8” BSPP	2
8	43147	1/2” BSP Male Quick Release Coupling	4
9	43617	Dust Cover	4
10	45634	Flow Reducing Nipple 3/4” UN'O to 3/8” BSPP	1

‘SLR Feeder’ 6 hose Hydraulics

Fork Tilt & Main Arm Ram & Sequence Valve (6 Hose versions)

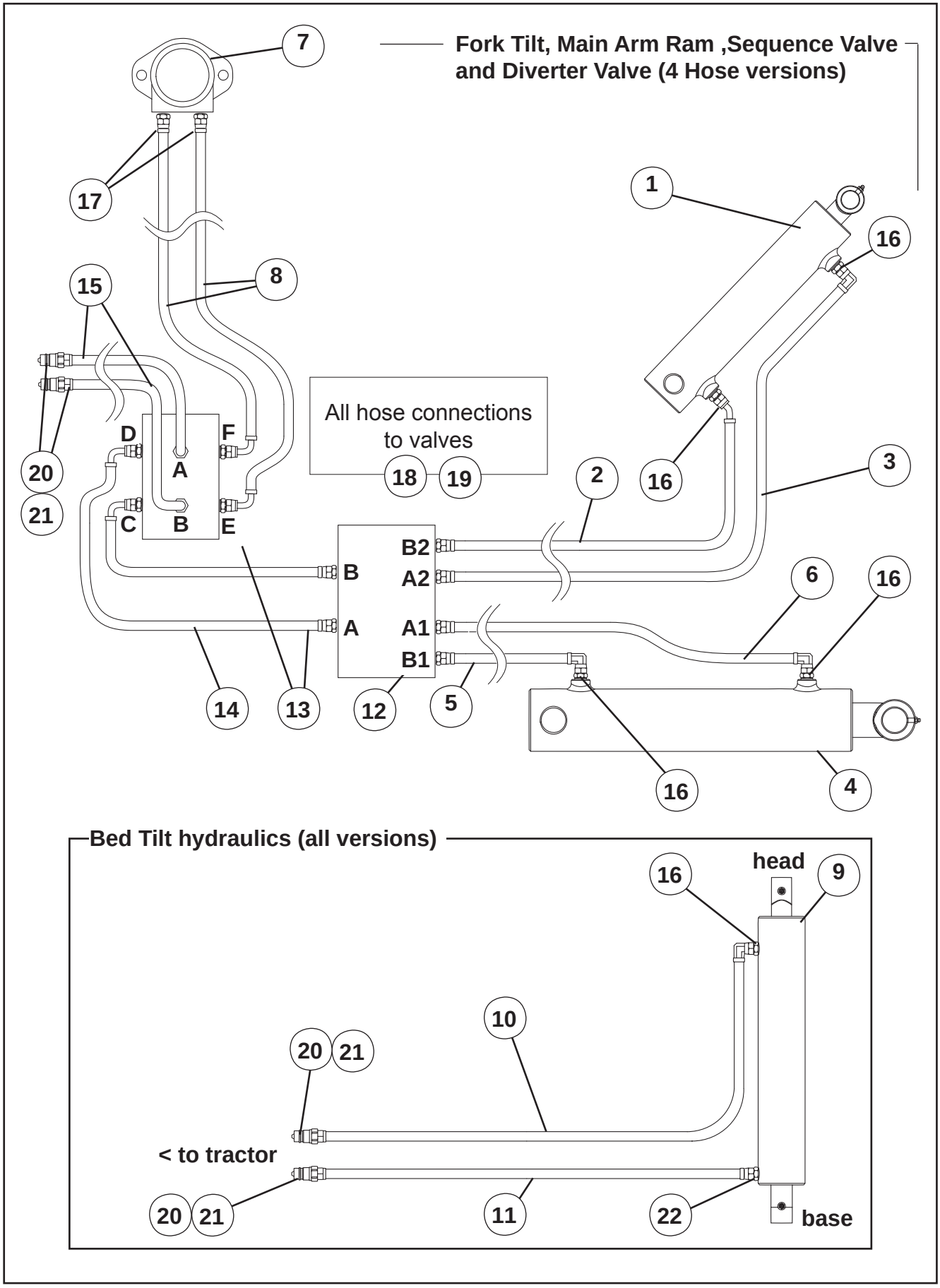




‘SLR Feeder’ Hydraulics

ITEM	PART No.	DESCRIPTION	QTY
	Fork Tilt Hydraulics		
1	61357	Fork Tilt Ram (See Page 26)	1
2	61533	Hydraulic Hose 1.44m long	1
3	61534	Hydraulic Hose 1.80m long	1
	Main Arm Hydraulics		
4	61356	Main Arm Ram (See Page 24)	1
5	61535	Hydraulic Hose 0.45m long	1
6	61536	Hydraulic Hose 0.90m long	1
	Valve & Fittings		
7	61527	Sequencing Valve	1
8	61537	Hydraulic Hose 3.93m long (Colour Code Blue)	2
9	43280	Nipple 3/4” UN'O to 3/8” BSPP	4
10	43391	Dowty Washer	6
11	43392	Nipple 3/8”-3/8” BSPP	6
12	43147	1/2” BSP Male Quick Release Coupling	2
13	43617	Dust Cover	2
14	45151	M8 Light Flat Washer	4
15	45165	M8 Spring Washer	4
16	44993S	M8 x 25 8.8 Setscrew Z/P	4

‘SLR Feeder’ 4 Hose Hydraulics

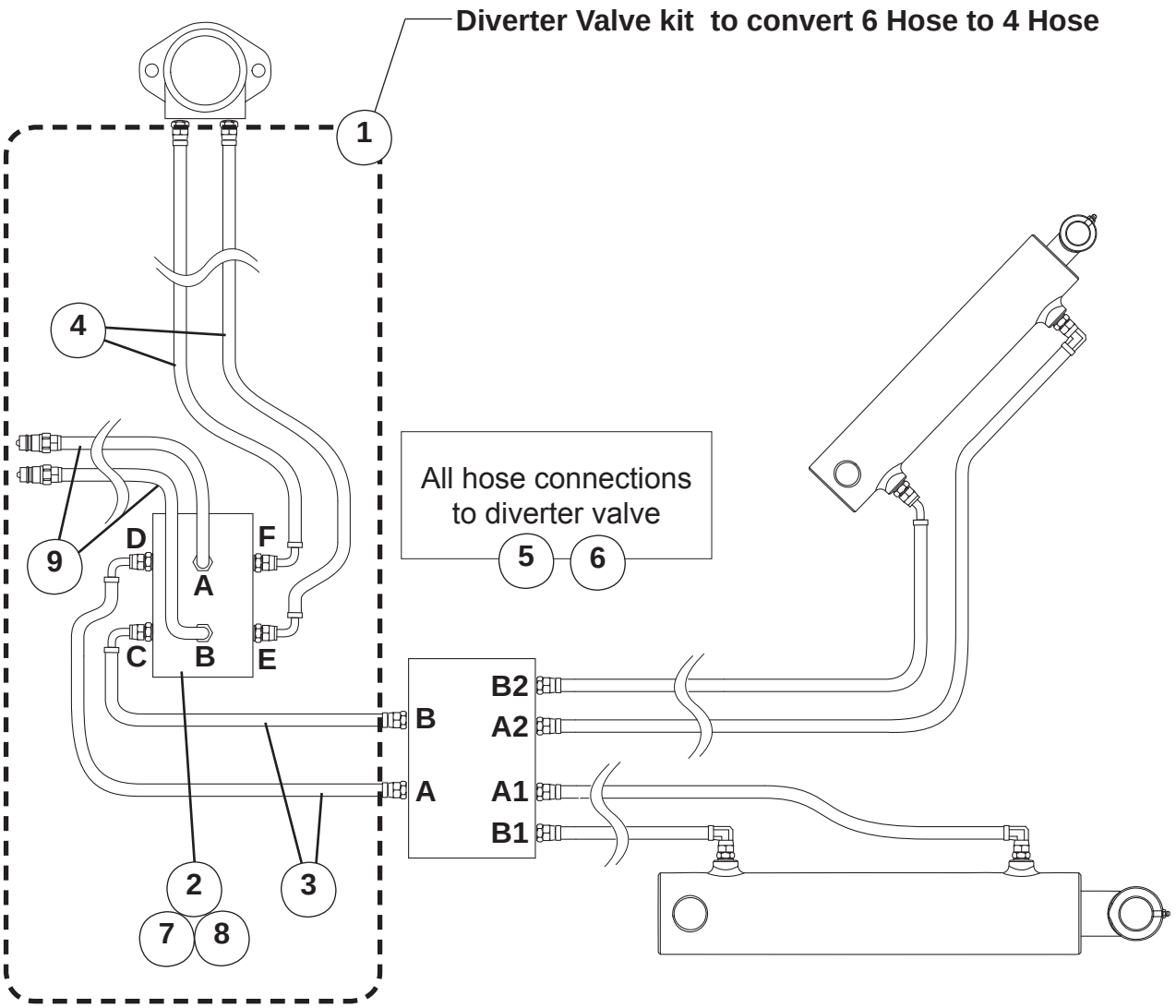


‘SLR Feeder’ Hydraulics

ITEM	PART No.	DESCRIPTION	QTY
	Fork Tilt Hydraulics		
1	61357	Fork Tilt Ram (See Page 26)	1
2	61533	Hydraulic Hose 1.44m long	1
3	61534	Hydraulic Hose 1.80m long	1
	Main Arm Hydraulics		
4	61356	Main Arm Ram (See Page 24)	1
5	61535	Hydraulic Hose 0.45m long	1
6	61536	Hydraulic Hose 0.90m long	1
	Elevator Motor Hydraulics		
7	30444	Hydraulic Motor 2 bolt	1
8	61542	Hydraulic Hose 2.04m long to Diverter Valve	2
	Bed Tilt Hydraulics		
9	61355	Bed Tilt Ram (see Page 30)	1
10	61530	Hydraulic Hose 4.50m long (Colour Code Yellow)	1
11	61531	Hydraulic Hose 4.62m long (Colour Code Yellow)	1
	Valves & Fittings		
12	61527	Sequencing Valve	1
13	61541	Hydraulic Hose 0.55m long	2
14	61528	Diverter Valve	1
15	61537	Hydraulic Hose 3.93m long (Colour Code Blue)	2
16	43280	Nipple 3/4” UN'O to 3/8” BSPP	5
17	43035	Nipple 7/8” UN'O to 3/8” BSPP	2
18	43391	Dowty Washer	12
19	43392	Nipple 3/8”-3/8” BSPP	12
20	43147	1/2” BSP Male Quick Release Coupling	4
21	43617	Dust Cover	4
22	45634	Flow Reducing Nipple 3/4” UN'O to 3/8” BSPP	1

Refer to page 34 for Sequencing Valve fasteners.

‘SLR Feeder’ 6 Hose to 4 hose conversion kit



Note: The hoses (item 3) between the diverter valve and sequence valve are connected so that the normal (feed out) rotation of the hydraulic motor and the lowering of the forks is made by the same tractor control in the same direction. This is so that if the bed is lowered when the hydraulic motor is running the fork arm will move away from the bed.

‘SLR Feeder’ 6 Hose to 4 hose conversion kit

ITEM	PART No.	DESCRIPTION	QTY
1	**61526K**	**Diverter Kit (6 hose to 4 hose conversion)**	**1**
	contains:		
2	*61528*	*Diverter Valve*	*1*
3	*61541*	*Hydraulic Hose 0.55m long*	*2*
4	*61542*	*Hydraulic Hose 2.04m long Diverter Valve to Motor*	*2*
5	*43391*	*Dowty Washer*	*6*
6	*43392*	*Nipple 3/8”-3/8” BSPP*	*6*
7	*44956*	*M6 x 45 8.8 Bolt Z/P*	*2*
8	*45136*	*M6 Nyloc Nut*	*2*
	Item 9, use the existing tractor to sequencing valve hoses.		
9	61537	Hydraulic Hose 3.93m long (Colour Code Blue)	*2*

The existing tractor to hydraulic motor hoses (Colour Code Red) are replaced by item 4 above